SONY®

BLACK TRINITRON COLOUR TELEVISION®

KV-M1620U
KV-M1621U
KV-M1620L
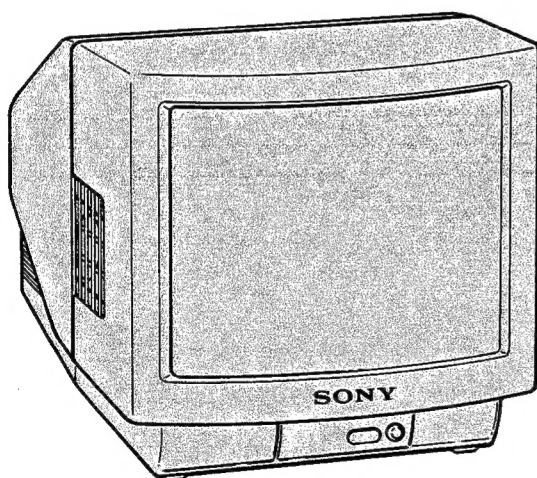
OPERATING INSTRUCTIONS

Table of Contents

Thank you for buying this Sony TV. You are now owning a high-quality TV.

Special Features of this TV

High quality picture
• The Black Trinitron picture tube provides a picture with high resolution and with high contrast.

Other features
• Colour system: PAL.
• 60 programme positions for presetting UHF.
• Remote controlled TV.
• Audio/Video input at the front of the set.
• 21-pin connector for the direct connection of video equipment or a computer.
• Teletext (only for KV-M1621U).

Safety Information

All TV sets operate on extremely high voltages.
To prevent fire or an electric shock, please follow the following safety procedures.
For your safety, refer all servicing to qualified personnel only.

For general safety:
• Do not expose the TV to rain or other moisture.
• Do not open the rear cover.

For safe installation:
• Do not block the ventilation opening.
• Do not install the TV in hot, humid or excessively dusty places.
• Do not install the TV in a place, where it may be exposed to mechanical vibrations.

For safe operation:
• Do not operate the TV on anything but 240 V AC, 50 Hz.
• Do not operate the TV if any liquid or any solid object falls on it - have it checked immediately.
• Unplug the set if you are not going to use it for several days.
• Do not pull on the power cord to disconnect the TV. Pull it out by the plug.

WARNING

The flexible mains lead is supplied connected to a B.S. 1363 fused plug having a fuse of 5 amp capacity. Should the fuse need to be replaced, use a 5 AMP FUSE approved by ASTA to BS 1362, ie carries the ⬦ mark.

IF THE PLUG SUPPLIED WITH THIS APPLIANCE IS NOT SUITABLE FOUR YOUR SOCKET OUTLETS IN YOUR HOME. IT SHOULD BE CUT OFF AND APPROPRIATE PLUG FITTED.
THE PLUG SEVERED FROM THE MAINS LEAD MUST BE DESTROYED AS A PLUG WITH BARED WIRES IS DANGEROUS IF ENGAGED IN A LIVE SOCKET OUTLET.

When an alternative type of plug is used it should be fitted with a 5 AMP FUSE, otherwise the circuit should be protected by a 5 AMP FUSE at the distribution board.

IMPORTANT - The wires in this mains lead are coloured in accordance with the following code:

Blue	Neutral
Brown	Live

As the colours of the wires in the mains lead of this appliance may not correspond with colour markings identifying the terminals in your plug, proceed as follows:

The wire that is coloured Blue must be connected to the terminal which is marked by the letter N or coloured Black.

The wire which is coloured Brown must be connected to the terminal which is marked with the letter L or coloured Red.

DO NOT - connect either the Blue or the Brown wires of the mains lead to the Earth terminal (markedwith the letter E, or by the Earth symbol ⏚) of a three pin plug.

Supplied Accessories

The following items are included in the box in which your TV was packed:
• One Remote Commander RM-694.
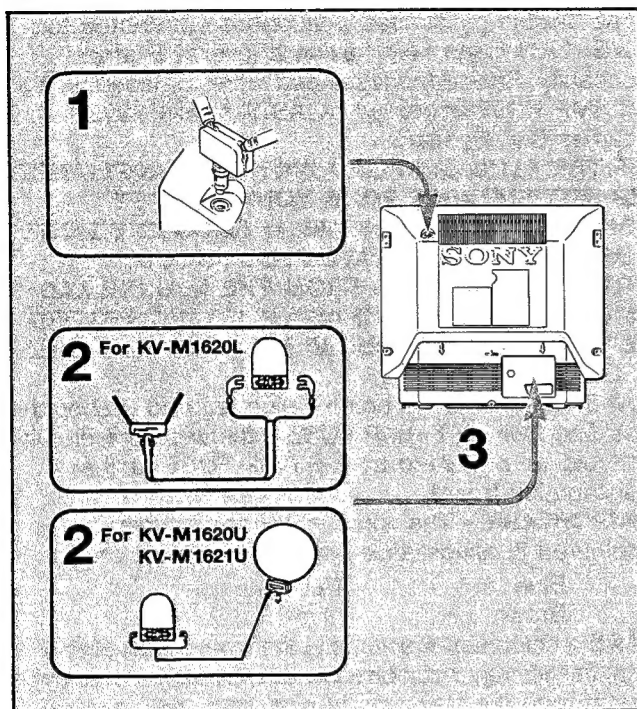• Two IEC designation R6 batteries.
For KV-M1620L:
• One VHF telescopic antenna with aerial connector.
For KV-M1620U KV-M1621U
• One UHF loop antenna with aerial connector.

How to connect the aerial

1 Insert the supplied aerial into the opening on top of the set.

2 Loosen the screws of the aerial clips, insert the aerial clips and tighten the screws.

3 Connect the aerial to the ⊤⊤ socket on the rear of the set. This socket receives the standard 75-ohm aerial plug.

Aerial adjustment
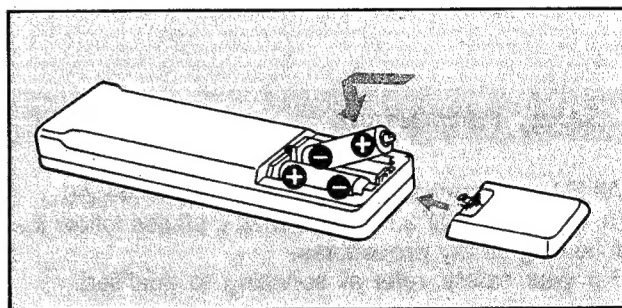Adjust the direction of the aerial until you receive the best possible picture. If the picture quality is not satisfactory, we advise you to use an outdoor aerial.

When using an outdoor aerial, fit the IEC aerial connector to the socket on the rear of the set, and fit the plug at the other side of the cable to the outdoor aerial.

How to connect this TV to the mains power

After having connected the aerial, plug the TV in. Your set is now ready for operating it.

How to insert the batteries into the Remote Commander

Before using the Remote Commander, you have to insert the supplied batteries into the Remote Commander. Insert the two R6 batteries into the battery compartment checking the correct polarity.

After having installed the TV, you now need to preset TV channels. Up to 60 programme positions are at your disposal. For channel presetting use the buttons with the red symbols on the Remote Commander.
Important: In order to ensure presetting, you have to keep the ♠ (SHIFT) button pressed, while pressing the other buttons (that is ♦, ⊞ +/−, C) during presetting.

Automatic Presetting of Channels

Action	Result
1 Turn on the TV using the power switch ⏻ on the set.	
2 Press both the ♠ (SHIFT) button and the ♦ PRESET button simultaneously.	You are now in the preset mode. The programme number flashes.
3 Press either the number buttons or PROGR +/− to select the programme number on which you want to preset the the channel. **Note:** In case of two digit numbers, first press −/−−, then the two number.	The selected programme number will be indicated.
4 Press both the ♠ SHIFT button and the ⊞ + or − button repeatedly, until the desired channel is tuned in.	The scale with the frequency band changes.
5 Repeat steps 3 and 4 for all other channels.	
6 Press both the ♠ SHIFT and the ♦ PRESET button simultaneously to store the channels.	All channels are now stored. The programme number stops flashing.

How to skip programme positions

Since you have 60 programme positions at your disposal, you may want to skip vacant programme positions, that is that they are skipped when you press the PROGR +/− buttons.
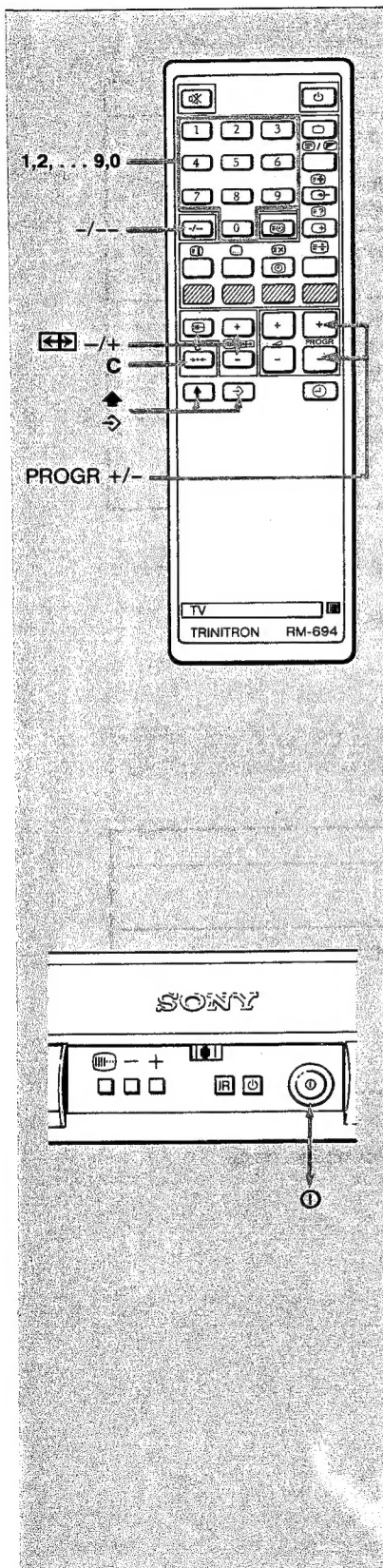
Action	Result
1 Press both the ♠ SHIFT button and the ♦ PRESET button simultaneously.	You are now in the preset mode. The programme position flashes.
2 Use either PROGR + or − to select the programme position you want to skip.	The selected programme position appears.
3 Press both the ♠ SHIFT button and the button C simultaneously.	
4 Press both the ♠ SHIFT button and the ♦ PRESET button simultaneously.	The programme position is now skipped. You are back in TV mode.

How to fine tune a channel manually

If the reception of a stored channel is not satisfactory, you can fine tune the channel manually.
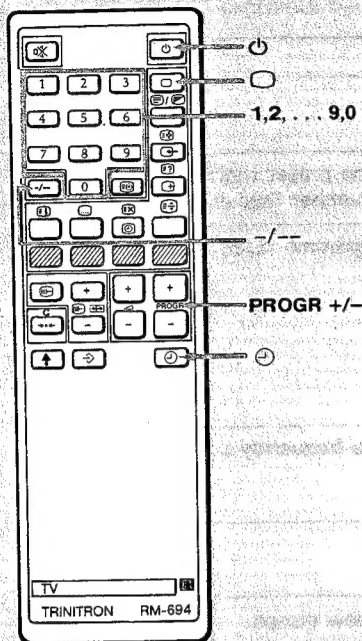
Action	Result
Press both the ♠ SHIFT button and the ⊞ + or − button simultaneously until the reception is good.	The channel is fine tuned.

Note: By pressing the respective programme number the automatic fine tuning will be restored.

1,2, . . . 9,0

−/−−

⊞ −/+

C

♠

♦

PROGR +/−

TV
TRINITRON   RM-694

SONY

Your TV set is supposed to be operated with the Remote Commander.
For the basic functions, however, it is also possible to use the buttons on the set.

How to switch the TV on and off

Action	Result
1 Press the power switch ① on the set.	The TV will turn on. **Note:** If the red indicator is on, the set is in standby mode.
2 Press a number button on the Remote Commander, to select a programme.	The selected programme appears.
In order to switch the set off temporarily: Press button ⏻ on the Remote Commander.	The set is in standby mode. Press button ○ or any number button to switch it on again.
In order to switch the set off temporarily: Press the power switch ① on the set.	The set is switched off.

Sleep Timer

Press the ⏲ button repeatedly until the required time period is displayed on the screen (30, 60 90 minutes or 0 for cancelling the request).
In this way you can select the time period after which the set switches itself automatically into standby-mode.

How to select programmes

Before selecting programmes make sure that you have preset channels.

Action	Result
1 Switch the TV on.	
2 Press PROGR +/− or the respective number button on the Remote Commander. In case of two digit numbers first press the button −/−− and then the two respective number buttons.	The selected programme is displayed.

On the set:
Press the − button for lower programme positions and the + button for higher ones.

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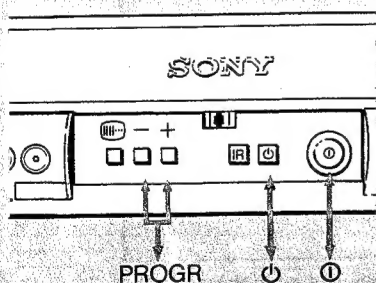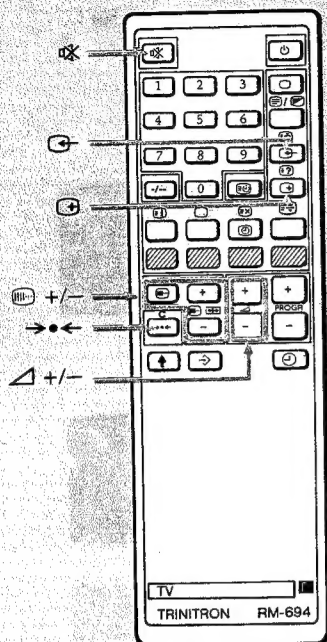
How to adjust the volume

Action	Result
Press ⊿ + or –.	The symbol and the bar for the volume are displayed on the screem. The volume is adjusted.

On the set
Press ⊞, until the symbol ⊿ is displayed on the screen, then adjust the volume by pressing the + or – buttons.

Muting of the sound:

Action	Result
Press button ⊄⊀ .	The sound is switched off. Press the button again to restore the sound.

How to adjust the picture

	Action	Result
1	Press button ⊞ repeatedly, until the desired item is displayed (◑ contrast, ◉ colour intensity, ☼ brightness).	The symbol and the respective bar display are displayed.
2	Press button + or –.	The selected picture item is adjusted.

On the set:
Press button ⊞ repeatedly in order to select the desired item, then adjust with the + or – button.

To return to factory-set levels
Press the button →•← .

Other functions

On-screen display
Press the button ⊕ to display the programme number on the screen and press the button a second time to make it disappear.

Selecting the signal of a connected device
Press the button ⊖ to receive the signal of the device (e.g. a VTR) connected at the V ⊖ A connectors (front of the set) or the 21-pin connector (rear of the set). Press the button ○ to return to the TV mode.
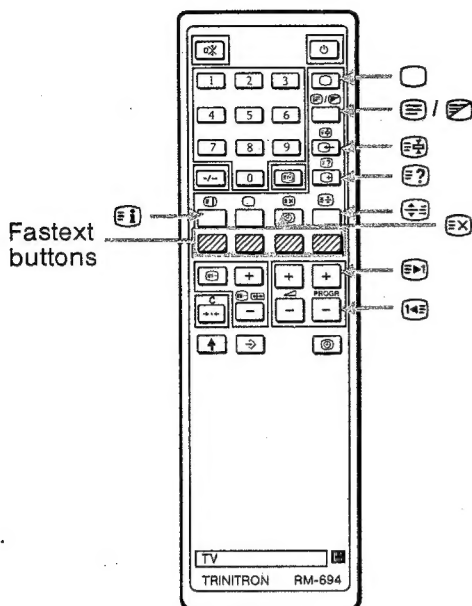
On the set:
Press ⊞ so that the symbols ○ and ⊖ are displayed on the screen. Press the + button to select the video input mode. To return to the TV mode, press the ⊞ and + buttons again.

Viewing Teletext

Fastext buttons
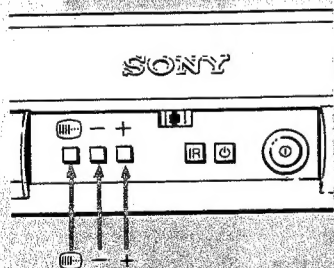
To view the teletext service, use the Remote Commander. The buttons for teletext operation are indicated in green.

Select the TV channel for the desired teletext service. If the signal is weak, teletext errors can occur.

To receive the teletext service of a different TV channel
1. Press ○ to return to the TV mode.
2. Select the desired TV channel.
3. Press ▤/▨ (TEXT/MIX).

Press ▤/▨ (TEXT/MIX) to display the teletext service.

Key in three digits of the desired page using the number buttons. If an error is made, complete the three-digit sequence by keying in any digit. Then, re-enter the correct page number.
The requested teletext page is displayed.

To return to TV mode press ○ on the Remote Commander.

Teletext Functions

To request Index Page
Press ⊞ (INDEX). If the necessary signal is not being broadcast, page 100 is displayed.

To access the next or preceding page
Press
▣▸ (PAGE +) or
◖▣ (PAGE -)

To superimpose the teletext display on the picture (MIX)
Press ▤/▨ twice from the TV mode.
Press again to return to the TEXT display.

To prevent the Teletext page from being updated/changed
Press ▣ (HOLD). The HOLD symbol appears on the screen.
To resume normal teletext reception (press ▤/▨ (TEXT/MIX)).
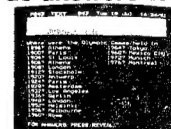
To enlarge the Teletext display
Press ▣ once to enlarge the upper half of the display; (press again to enlarge the lower half of the display. And press again to return to the normal display).

To reveal concealed information such as answers to a quiz
Press ▣ (REVEAL).
Press again to conceal the answers.

To watch the TV programme while waiting for a requested page to be displayed
1. Request the new page.
2. Press ▣ to watch the TV programme. The requested page number and other data appear at the top of the screen. When the requested page has been captured, the page number is displayed in the top left hand corner of the screen.
To view this page, press ▤/▨.

Fastext Operation

FASTEXT teletext enables you to access pages quickly and conveniently with one key operation.
When a FASTEXT page is broadcast a colour coded menu will appear at the bottom of the screen. Each coloured prompt relates to the coloured keys on the Remote Commander. Pressing one of these will select the page described by the prompt.
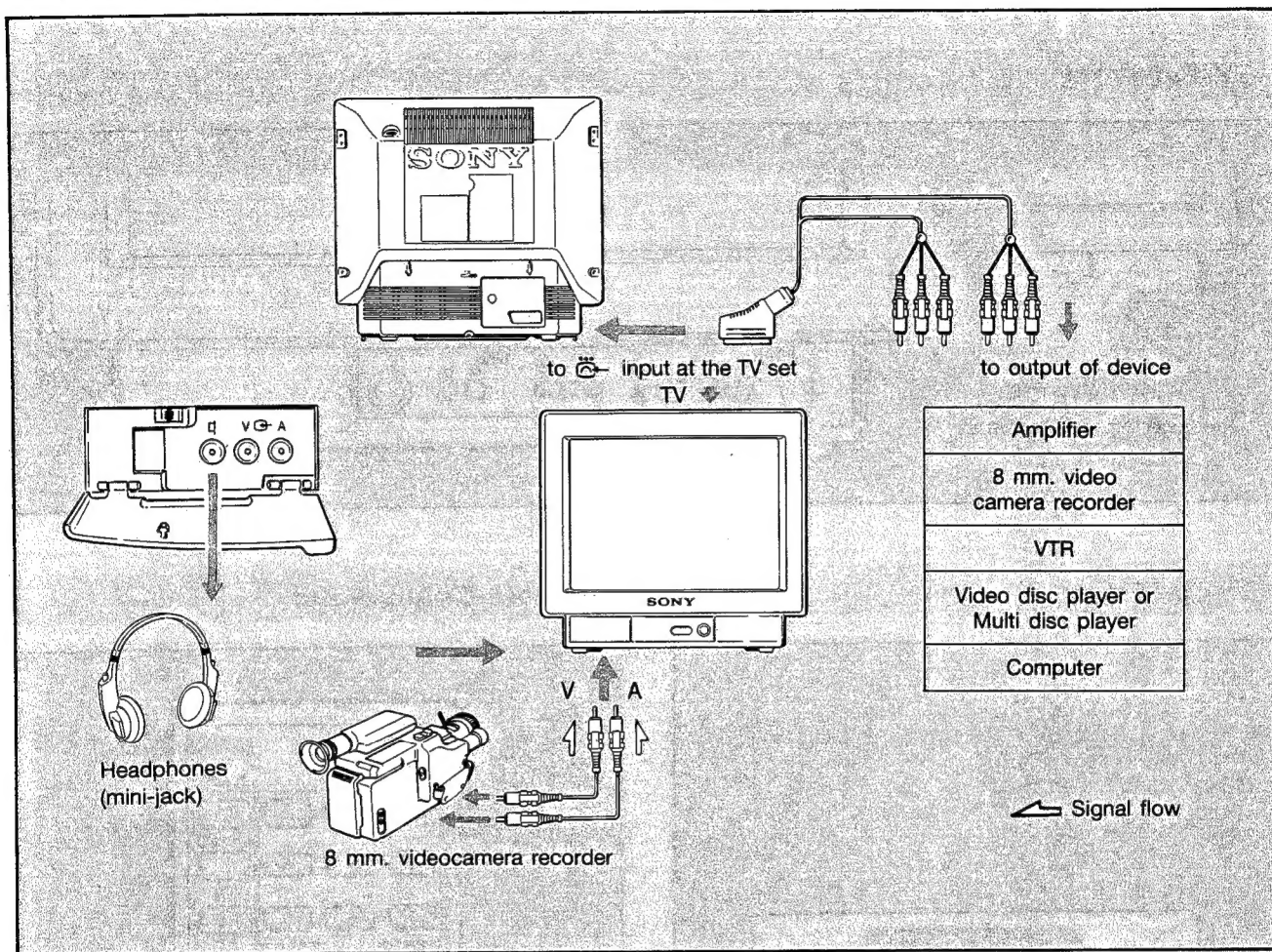Selection may also be made by entering the three digit page number in the normal way.

Correct FASTEXT operation relies on the necessary signals being transmitted by the Broadcasting Authorities. It is possible that some Broadcasters will not support this transmission.
If FASTEXT is not transmitted, the decoder will operate as outlined above.

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How to connect additional Audio/Video equipment

to ⌨ input at the TV set

to output of device

TV

Headphones
(mini-jack)

8 mm. videocamera recorder

Amplifier	
8 mm. video camera recorder	
VTR	
Video disc player or Multi disc player	
Computer	

Signal flow

How to view the Video input signal

Press the button ⌐ on the Remote Commander. Press the button ○ to return to the TV mode.

On the set:
Press ▥ so that the symbols ○ and ⌐ are displayed on the screen. Press the + button to select the video input mode. To return to the TV mode, press the ▥ and + buttons again.

Notes
- When you have Audio/Video equipment connected to both the A/V connector and the 21-pin terminal, make sure that not both are switched on at the same time, otherwise the picture could be incomplete.
- In case of sound or picture distortions move the VTR away from the TV set.

In the following you will find a short description of the parts and their function on the set or on the remote commander using the respective symbols. For more details refer to the page number given in the index.

TV-Set Front

Press ⬆ to open the panel
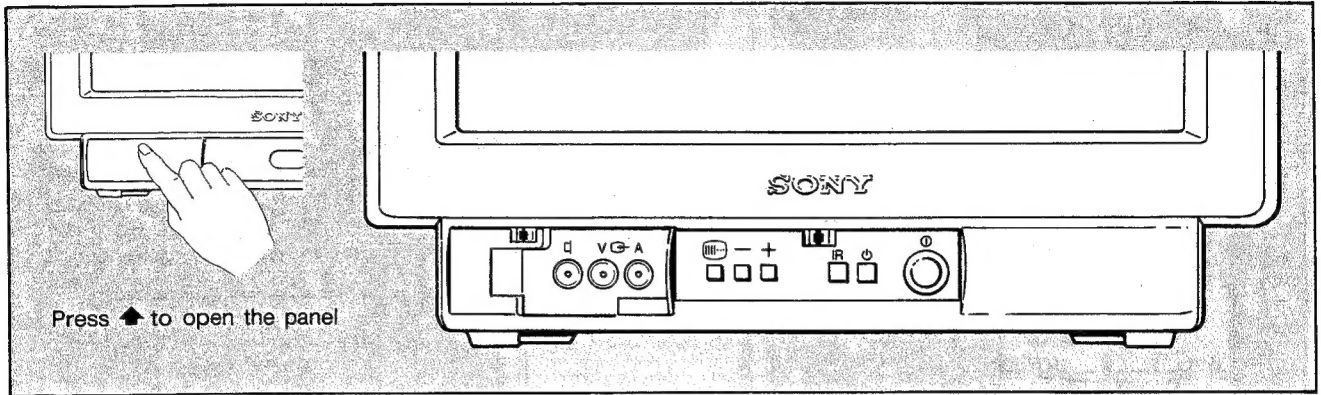
TV-Set Rear

Remote Commander

TV

TRINITRON   RM-694
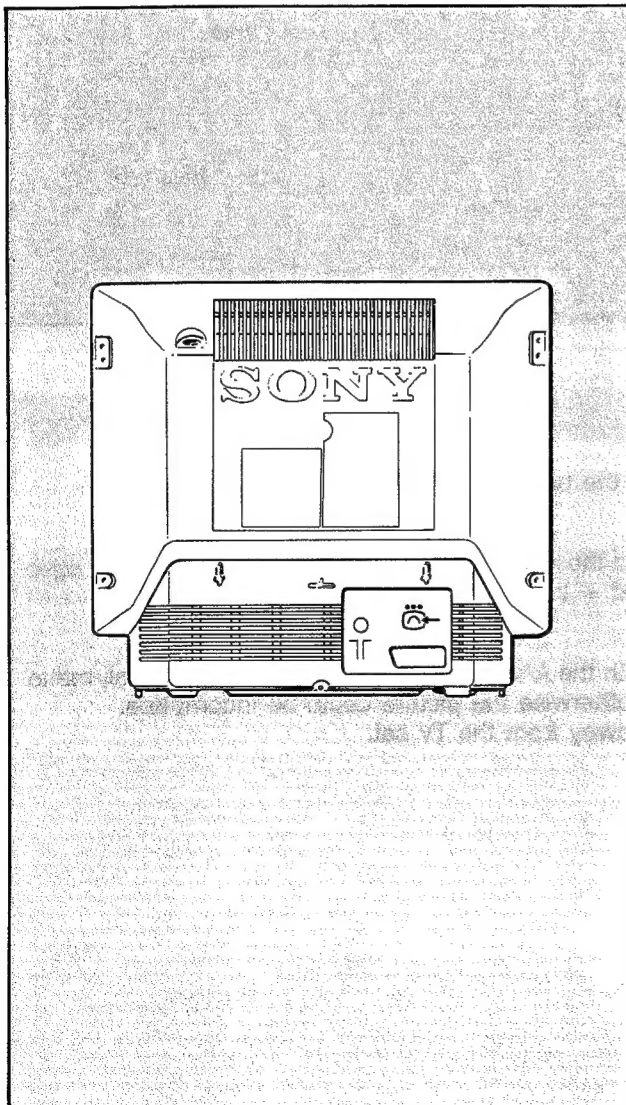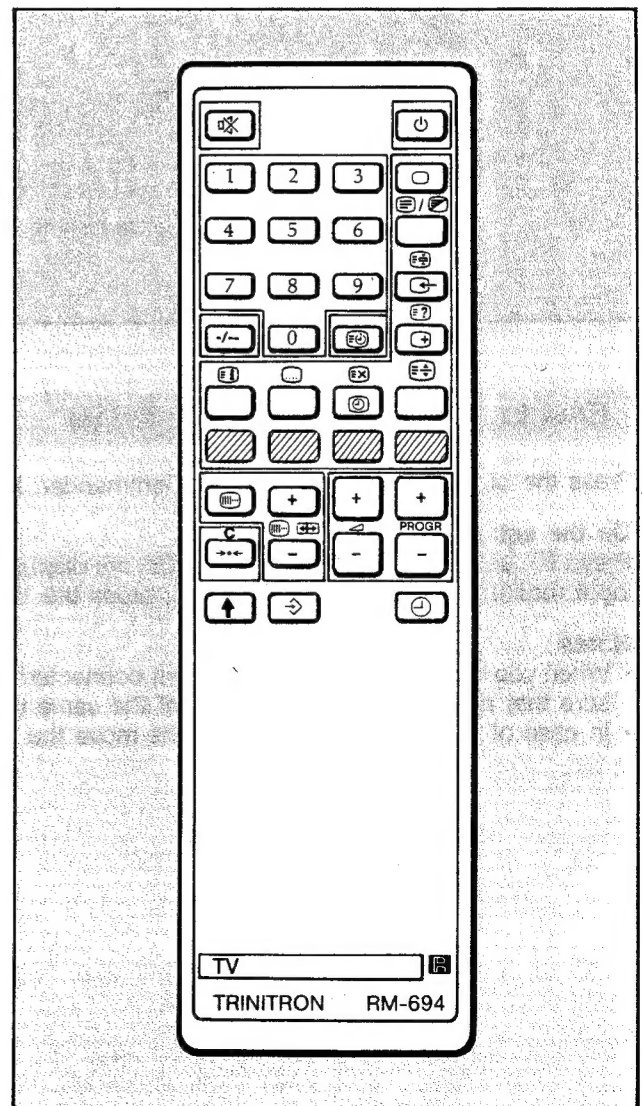
TV set

Symbol	Function	Page
⊓	Headphones jack (mini-jack)	9
V ⊖	Video input jack	9
A ⊖	Audio input jack	9
▥ −/+	Buttons for sound and picture adjustment	7
−/+	Programme scanning buttons	6
IR	Remote control detector	
⏻	Standby indicator	6
①	Power switch	6
⊤	Aerial socket (rear of the set)	4
⬚⊖	21 -pin connector (rear of the set)	9

Remote Commander

Symbol	Function	Page
⊏✕	Mute button	7
1–9, −/−−	Number buttons – in case of two digit numbers first press button −/−− and then two number buttons	5, 6
⊙★	Button has no function	
▥	Select button for picture adjustment item	7
+/−	Buttons for adjusting picture items	7
◆ and ◀▶ +/−	Buttons for manual fine tuning of a channel / channel search	5
→•←	Button for resetting the picture adjustment items to standard	7
◆ and C	Buttons for clearing a programme position (in preset mode)	5
◆	Functions only in combination with other buttons	
⟿ and ◆	Preset mode on/off buttons	5
⏻	Button for switching the TV set into standby mode	6
▢	Used to return to TV-mode from standby and video input modes	6, 7
⊖	Button for selecting the video input modes	6, 9
⊕	On/off button for onscreen display	9
⊚	Button has no function	
PROGR +/−	Programme scanning buttons	6
◿ +/−	Buttons for adjusting the volume	7
⊙	Button for activating the sleep timer	6

Note	Buttons not referred to in this index have no function. The green buttons are for Teletext (only M1621U).

Troubleshooting

Problems with picture and sound quality can often be solved by checking the symptom in the list below and by following the suggestions.

| Symptom	Checking and solution
No picture (screen not lit), no sound	• Connect the set to a working outlet • Press the power switch. • If the standly indicator shines red, press the TV button ◯ on the Commander. • Check the aerial connection.
Poor or no picture (screen not lit) but sound good	• Adjust ◑ ☼ and ◉ by pressing the + or – button after selecting with the ▦ button.
Good picture, but no sound	• Press ◁+. • If ◁ is displayed on the screen, press ◁ on the Remote Commander.
No colour for colour programmes	• Adjust ◉ with the button after selecting with the ▦ button. • Press ►◄.
Snow and noise	• Check the aerial connections.
Dotted lines or stripes	• This may be caused by local interference (e.g. cars, neon signs hairdriers). Adjust the aerial for minimum interference.
Double images or "ghosts"	• This may be caused by reflections from nearby mountains or building. A highly directional outdoor aerial may improve the picture.

Specifications

Television system	
Colour system	PAL
Channels coverage	KV-M1620U/KV-M1621U: Channels UHF 21-69 KV-M1620L: Channels VHF A-J, S1-S20 UHF 21-69
Picture tube	Black Trinitron tube 90-degree deflection approx. 40.1 cm. (16") (Approx. 37 cm. picture measured diagonally)
Inputs	21-pin connector: CENELEC standard RGB Input Audio/Video input jacks phono jacks
Output	Headphones Jack: minijack

Sound output	5 W (music power)
Power consumption	KV-M1620U 67 W KV-M1621U 72,5 W KV-M1620L 54 Wh
Dimensions	Approx. 399 x 365 x 413 mm. (w/h/d)
Weight	KV-M1620U 12,5 kg KV-M1621U 13 kg KV-M1620L 12,5 kg
Supplied accessories	RM-694 Remote Commander (1) R6 batteries IEC designation (2) KV-M1620L: VHF telescopic antenna (1) KV-M1620U/KV-M1621U: UHF loop antenna (1) Aerial connector (with built-in 300 - 75 ohm matching transformer)

Design and specifications are subject to change without notice.